

How to Benchmark Properties with Offsite Renewable Energy

Users can track the purchase, consumption, and emissions impact of offsite renewable energy, including bundled green power products and unbundled renewable energy certificates (RECs). This document lays out the steps to track the use of offsite renewable energy at your building to obtain accurate metrics for energy and emissions performance.

Table of Contents

- ✓ Part 1: Understand the Data Required and Metrics Generated by Portfolio Manager
- ✓ Part 2: Set Up Your Meters and Enter Consumption Data
- ✓ Appendix A: Offsite Renewable Energy Defined

1 Understand the Data Required and Metrics Generated by Portfolio Manager

Unlike onsite-generated renewable energy, when you purchase offsite green power, your electricity still comes from the grid. Therefore, when tracking offsite green power in Portfolio Manager, you need to specify the amount of grid electricity you consumed for which you also own RECs. This takes place via the “Grid Electricity” meter type.

Note: the use of offsite green power will *not* improve a property’s ENERGY STAR score, as it does not lower the actual quantity of energy required to operate a building. However, the purchase of offsite green power (including unbundled RECs) will impact a property’s Avoided Emissions.

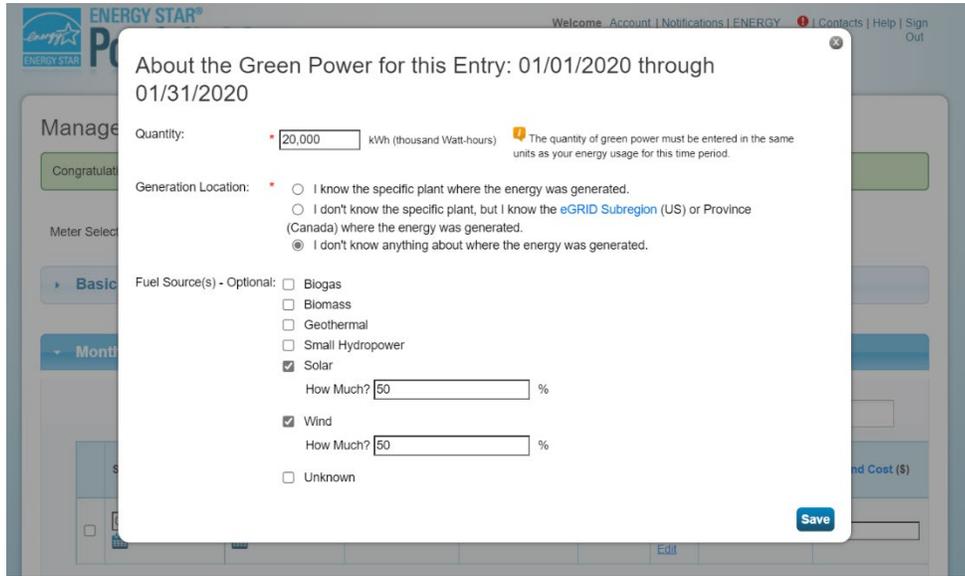
2 Set Up Your Meters and Enter Consumption Data

You will enter your offsite green power using the “Grid Electricity” meter type. If you need help setting up meters, see [How to Get Utility Data Into Portfolio Manager](#).

1. Access your meter(s) from the “Energy” tab. Click on the meter name to open the “Manage Bills” page for this meter.
2. For each entry in your grid electricity meter, if any portion of your electricity consumption is offsite green power, check the “Green Power” box.

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost (\$)	Estimation	Green Power	Demand (kW)	Demand Cost (\$)
<input type="checkbox"/>	1/1/2020	1/31/2020	40,000		<input type="checkbox"/>	<input checked="" type="checkbox"/>		

3. The “Green Power” pop-up box will appear onscreen.



- ✓ The “Quantity” of green power is defaulted to the value you previously entered for this meter consumption record. Adjust this value to reflect the amount of grid electricity consumption that can be considered offsite green power. For example, if you are on a utility plan that guarantees that 50% of your electricity will come from renewable sources, then you would enter 50% of the total energy use as the quantity. In a case where total energy use for the billing period is 40,000 kWh, then 20,000 kWh would be the total quantity of Green Power entered, as in the screen shot above.
- ✓ Specify the location where the energy was generated – either the specific plant or the [eGRID subregion](#). This information should be documented as part of the corresponding RECs, and/or can be obtained from your energy supplier. This information will enable Portfolio Manager to generate the most accurate “Avoided Emissions” metric for your property. If you are not able to identify the location where the offsite renewable power originated, choose the third option (“I don’t know anything about where the energy was generated”). See [this FAQ](#) for additional information about this step.
- ✓ If it’s helpful to your organization’s accounting, you can also indicate the fuel source(s) from which the offsite green power was generated. This step is optional, but if you choose to enter this information, you will be required to enter the corresponding percentage(s). If these percentages do not add up to 100%, an error message will be returned.

4. Click “Save,” and the pop-up will disappear. You will now see an “Edit” link that will allow you to review and update the information, as needed.

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost (\$)	Estimation	Green Power	Demand (kW)	Demand Cost (\$)
<input type="checkbox"/>	1/1/2020	1/31/2020	40,000		<input type="checkbox"/>	<input checked="" type="checkbox"/> Edit		

5. Repeat the process for each consumption entry that includes offsite green power.
6. When you are finished, click “Save Bills” at the bottom of the page.

Appendix A: Offsite Green Power Defined

Note: Please reference our detailed [Green Power Technical Reference](#) for further details.

Offsite green power is a product you purchase from your local utility or third-party supplier. Often the supplier will bundle RECs with the underlying physical electricity into a single product. In this case, the actual electricity is sourced from the various power plants in your area, while the RECs are the environmental attributes of green power generated in another part of the country. Although the RECs were generated elsewhere, they are bundled to your electricity purchase, and therefore, you own the rights and can count the emissions benefits in your GHG reporting. The emissions benefit is based on the location where your RECs were generated, not the location of your property.

In some cases, you may purchase your electricity from a local utility and purchase your RECs separately. This may occur if your organization makes a corporate purchase of RECs to cover electricity use across a portfolio of properties. Although these RECs are not bundled with electricity at the time of purchase, you can effectively “bundle” them in Portfolio Manager, by designating grid purchased electricity as green power and entering the appropriate REC information.

The purchase of offsite green power is a GHG reduction strategy. When you purchase offsite green power, you purchase the rights to a zero-emissions energy supply. These purchases can be an important part of your overall GHG reductions strategy. With offsite green power you still purchase and receive your electricity from your local grid. Like any other building that receives its energy from the grid, you are assigned the national source energy factor to calculate your Total GHG Emissions. For this reason, the computation of your site energy and source energy are unchanged. These metrics quantify the real energy requirements of your building. The purchase of the RECs does not change the thermodynamic energy requirements of your building.

To learn more about Portfolio Manager, visit www.energystar.gov/benchmark.

To get answers to your questions, visit www.energystar.gov/buildingshelp.